THE
BOSTON MEDICAL AND SURGICAL JOURNAL.

New Series.] Thursday, February 15, 1872. [Vol. IX.—No. 7.

Original Communications.

THE USE OF THE OPHTHALMOSCOPE IN THE DIAGNOSIS OF BRIGHT'S DISEASE OF THE KIDNEYS.

From the Records of the Boston Society for Medical Observation, W. L. Richardson, M.D., Secretary.

At the meeting held March 20, 1871, the question having been asked as to the use of the ophthalmoscope in the diagnosis of Bright's Disease of the Kidneys, Dr. Williams said that as yet it was undetermined at how early a stage of the disease the ophthalmoscope was of use as an aid to diagnosis. In certain cases, it had been used at a very early stage, and characteristic appearances were detected at the fundus. The prognosis was always unfavorable in cases of Bright's disease accompanied by changes in the retina; although cases were on record in which, though the retina showed the white patches peculiar to this disease, recovery had yet taken place.

Dr. Wadsworth said that the retinitis which sometimes occurs in diabetes mellitus may present appearances identical with those in Bright's disease.

Dr. Hay alluded to a case in which Graefe had made out the diagnosis of Bright's disease from having seen with the ophthalmoscope those appearances of the retina which were supposed to be typical of Bright's disease, and yet, after death, the kidneys were found to be perfectly healthy, the appearances seen in the retina having been caused by a tumor of the brain.

June 19th, 1871.—Dr. Williams said that at a recent meeting of the Society the question was asked whether it was possible to distinguish, with certainty, the ophthalmoscopic appearances observed in connection with Bright's disease from other morbid changes seen in the fundus of the eye.

In answer to this question, he would read two cases selected from an unusually large number which had come under his observation within the last six months, where the subsequent course of the disease and death of the patients had afforded unmistakable confirmation of the diagnosis made by means of the ophthalmoscope at a time when no suspicion of kidney disease had been entertained.

Case I.—Mr. —— consulted him Dec. 13th, 1870, complaining of much dimness of sight. Examination with the ophthalmoscope showed dilatation of the retinal veins, marked yellowish-white exudation around the optic disc, indistinctness of outline of the disc itself, small, flame-like hæmorrhagic patches here and there in the vicinity of the optic nerve and the macula lutea, and a group of brilliant white spots clustered about the macula lutea.

On inquiry, the patient said that he had suffered for some time from severe headaches, which he had attributed to gastric disturbance, but which were ascribed, by an irregular practitioner whom he had seen, to his liver. No disease of the kidney had been suspected, and the gentleman was incredulous as to the correctness of Dr. Williams's opinion when it was expressed to him. But on testing the urine by heat and nitric acid abundance of albumen was found. He was enjoined to give up the more active portion of his business, which prevented his taking proper care of himself, and to be regular in his hours for meals. Mild tonics were given.

No unfavorable prognosis was given to the patient, but his family were informed as to the probable termination of the disease.

Under the plan of treatment recommended, the patient improved in health, and on his last visit to Dr. Williams, near the end of January, he was free from pains in the head, and was very cheerful and hopeful. But his face had a puffy look, and Dr. Williams could not feel the same confidence that all was going on well with him. No examination was made at this time, as he came in haste, merely, as he said, to report progress.

He left the city soon after, hoping for benefit from change of air; but a few days afterwards he broke down, almost at once, new cerebral symptoms came on, and a fatal result soon ensued.

At the autopsy, as reported by his attending physician, the kidneys exhibited very extensive fatty degeneration, with several cysts.

Case II.—Mr. ——, æt. 27, consulted Dr. Williams May 3d, 1871.

Twelve weeks previously, he had severe pains in forehead, and noticed dimness of sight. This dimness increased till, now, he can count fingers only at six inches from his eyes. His face was pale and œdematous. Has had pain in right lumbar region, and also in left side, attributed by his physician to an enlarged spleen. His urine has considerable cloudy deposits after standing, and coagulated on being heated.

The ophthalmoscope showed very extensive exudations in the vicinity of the optic discs, and hæmorrhagic spots were extensively scattered over the retinæ.

The prognosis given to his father, who accompanied him, was most unfavorable as regarded his sight and his life, and the patient returned home.

May 15th.—His father wrote, "He bore the journey home remarkably well, and for the two succeeding days (6th and 7th) appeared as well as when you saw him, except a swelling in one foot and leg, the inflammation extending nearly to the knee. He was perhaps slightly prostrated by the fatigues of the journey. Saturday night he had but little rest, and got up on Sunday morning with the appearance of having a very severe cold in his head and chest, the cords of his neck inflamed and painful. He soon had a chill. Most of the day he was in a kind of lethargic sleep. Monday, he was more comfortable, the soreness having left his throat, but cords of his neck still painful. Tuesday morning, he was much prostrated, and could not walk without support.

"Up to this time he had confidently expected to recover, notwithstanding the little encouragement you gave him.

"About this time the swelling in his neck and chest increased considerably, he constantly growing weaker. He was very thirsty. Wednesday, between 2 and 3, P.M., he became partially deranged, talking almost continually, but could be called back to consciousness for a moment by speaking to him. This continued till about 9, P.M., when his consciousness fully returned—he bade good-bye to his friends, and quietly breathed his last."

THE CLIMATE OF COLORADO.

By W. F. McClelland, M.D., Denver, Col.

Considerable difference has always existed among medical men as to what altitude, other things being equal, was most favorable for the restoration of chronic invalids to health; this, undoubtedly, depends much upon the character of the disease, the state of the disease being improved, or the contrary, by the relative altitude above the sea. In this connection, the question has been asked if Colorado should be recommended for persons suffering from asthma and similar diseases.

The physiological effects of a residence at a great altitude are to increase the frequency of the respiration and accelerate the pulse. Such results might be in some diseases disastrous, or even fatal; but not so with asthma, the increased activity required of the respiratory organs being a direct and constant benefit. The change, also, has the effect to assist digestion, and the result must be that the blood becomes more perfectly aërated and the system improved in tone. The question has been asked whether that peculiar form of asthma which makes its appearance about the 15th of August, called hay asthma, would be relieved by a residence in Colorado. I would say yes, above all others. This disease, as we are led to believe by recent investigations, is due to the presence in the air of spores, produced during the growth of certain flowers and grasses. A visit to the elevated portions of the Eastern States affords relief from the sufferings caused by this malady. We are certainly justified in recommending the climate of the Rocky Mountains, the backbone of the continent, where the purest air exists and a dry atmosphere, whose influence is shown to be beneficial in the treatment of this disease. The atmosphere of Colorado, even at the time of the greatest amount of rain-fall, is never damp. The evening air can be breathed with impunity, and even invalids can camp out on the plains without shelter, with no fears of physical harm.

The eminent English physician, Dr. Chambers, in his lectures on the renewal of life, gives the very sensible rule respecting choice of climate for consumptives, not to mind the average height of the thermometer or its variations; not to trouble one's self about the mean rain-fall, or to be scientific at all, but to find out by some one's journal how many days in the year are fine enough to go out in the forenoon and afternoon, and how many nights one can sleep well as far as the temperature is concerned: these are the tests we require. If we judge from all these data, Colorado is one of the most favored spots on the face of the globe for asthma, consumption and other chronic diseases, or for patients needing relief from excessive work, either of body or mind. The variety of altitude in Colorado affords great facility for choice of temperature and density of atmosphere; a ride of two hours over the plains, and six hours of mountain travel by carriage, over roads pronounced the best of the kind in the world, and through the grandest of scenery, carries one from the summer-heat of the valley through intermediate grades of climate to an altitude where an overcoat is a comfort by day and a blazing fire a necessity by night. Good inns are found on all the roads, and towns and villages having the refinements as well as the comforts of life are situated upon the mountains, ten thousand feet above the level of the sea. Under such tonic influences, invalids from abroad rarely fail to improve rapidly. Asthma, in its most aggravated and long-seated forms, is relieved in so nearly every instance by a residence here that the exceptions are not to be taken into account; and almost perfect immunity from it is enjoyed by every case remaining in the dry, salubrious atmosphere and almost constant sunshine of Colorado. Consumptives who come here before the ravages of the disease have made too great advances, almost certainly recover; while others, who could elsewhere only exist in constant suffering and helplessness, are here enabled to pass the remainder of their days in comparative comfort, frequently gaining a considerable degree of vigor. Dyspeptics also recover their lost powers of assimilation, and by proper care become robust. Those afflicted with bronchitis and affections of the throat, many of whom have tried other localities and even sea-voyages in vain, become sound and well by a sojourn in Colorado.

DEATH OF SIR JAMES MURRAY, BART., M.D.—The death is announced of this veteran of our profession at the ripe old age of eighty-three. He has been for many years Inspector of Anatomy for Ireland, and physician to the Lord-Lieutenant. He was born in 1788, was educated at Edinburgh and at Trinity College, Dublin, and received the honor of knighthood in 1863. —*Dublin Med. Press and Circular.*

Reports of Medical Societies.

SELECTIONS FROM THE RECORDS OF THE OBSTETRICAL SOCIETY OF BOSTON.

SECRETARY, J. B. TREADWELL, M.D.

MAY 13, 1871.—Dr. Buckingham, the President, in the Chair.

Absence of Vagina.—Dr. Curtis reported the case.

March 22d, saw, for the first time, Lizzie D., 16 years old, a tall, slender, unhealthy-looking girl, with pallid face and thin body. She had complained for seven months of abdominal pain and distention, especially marked at each probable menstrual period, though the catamenia had never appeared.

On examination, the abdomen was found somewhat prominent, with an ill-defined, movable, elastic, rounded mass, rising from the pelvis and distending the abdomen to the navel, especially on the right side. The external genitals were covered with a remarkably abundant growth of dark hair, and were not in the least distended. There was a mere trace of a vaginal opening in the shape of two small cul de sacs or folds below the meatus, one below and somewhat to the left of the other. The bladder was high up and forwards. Per rectum, the pelvis was felt to be filled with a large firm mass, continuous with that in the abdomen, rounded and hard, of the size of a child's head. No uterine neck could be felt. A sound in the urethra and a finger in the rectum were separated in front of the tumor by a thin wall of tissue.

Eleven days afterward, having been in the Massachusetts General Hospital some days, the following operation was performed by Dr. Hodges: An incision was made in the median line about the centre of the vulva. As no trace of a vagina appeared, a careful dissection was made between the bladder and rectum, to the depth of an inch, with scissors. The dissection had now reached a point one inch from the tumor. A large trocar was next introduced, from which immediately flowed a thick, chocolate-colored fluid. The opening was enlarged by a dilator, the fluid welling out in a flood. No efforts were made to expel the retained fluid. No pressure was allowed on the abdomen, the contents of the uterus exuding by the natural contraction of the parts, during four or five days. No injections into the cavity were practised.

During the next fourteen days, the patient had more or less abdominal tenderness and pain, requiring opiates; and on the four days preceding death, frequent chills with consequent sweating.

No *post-mortem* examination was allowed.

Peritonitis following protracted Labor and the Use of Forceps.—Dr. Ayer reported the case.

Primipara, anæmic; twenty-six hours in labor. The forceps was easily applied, and the patient delivered in forty-five minutes, traction being employed during the expulsive efforts of the uterus. There was no abdominal tenderness the next day. On the second day, the pulse was 100, and there were febrile symptoms and tenderness over the inferior, anterior portion of the abdomen. The tenderness extended in area, and the whole abdomen became tympanitic. This condition continued for two or three days. Urination normal. Opium, alkalies and turpentine were administered internally and externally. On the sixth day, for the first time, there was slight lochial discharge. On the eighth day, the patient was better, and recovered rapidly. There was no erysipelatous patient under Dr. Ayer's care at the time. He considered the case as one of local peritonitis, caused by the use of forceps.

Dr. Abbot questioned whether the forceps had anything to do with the attack, which in his opinion was metritis, and due rather to the lingering character of the labor, and might have been averted had the instruments been employed earlier.

Dr. Read believed that most *post-partum* troubles are due to delaying too long the use of forceps.

Dr. Ayer remarked that he had noticed that anæmic women are more likely to become the subjects of peritonitis than others.

Dr. Abbot asked if the urine was examined in the case reported.

Dr. Ayer replied that it was not.

Dr. Buckingham said that he could not see how forceps had anything to do with the production of the unfavorable symptoms.

Dr. Reynolds asked if any gentleman present had ever seen serious injury to the head from the proper application of forceps? He knew of only one instance of such injury, and in that he believed the forceps had been misapplied; the frontal bone was fractured. Presentation antero-posterior, with occiput to the sacrum, the occiput having been slightly to the right at an earlier period; the forceps was applied exactly over the ears: the head should have been rotated before traction was made.

Dr. Read said it was his opinion that the head could not be rotated after it was once well down in the pelvis.

In answer to the question as to injury to the head from forceps—

Dr. Cotting said he had never seen an instance of anything more than superficial injury.

Dr. Abbot remarked that in some cases it is difficult to say whether the forceps kills the child or not; in such cases it is certain the child could not be born living without it, and the question is therefore unimportant.

Drs. Wellington, Curtis, Sinclair and Ayer said they had never seen any instance of injury to the head.

Dr. Buckingham said that he did not know by observation of an instance in which the child had been destroyed by forceps. He had seen all sizes of heads, and all presentations and positions in which delivery was performed, both with and without forceps. Children died as often when delivered with forceps as without. The compression of the forceps would not kill, unless the head was so large, or the pelvis so small, that the child could not be delivered alive in any way.

Dr. Ayer said the only ill effects he had ever seen was a wound upon a cheek which became gangrenous.

Morbid Condition of Umbilical Cord.—Dr. Read mentioned the following case of labor which he had recently seen:—

The woman was stout; the pains short and ineffective; delivery was effected by forceps; the cord was filled with dark, grumous blood, like diluted meconium. Respiration about once per minute for the first hour, but gradually improved; the child is now doing well.

Contagiousness of Erysipelas in the case of Lying-in Women.—Dr. Cotting referred to the case of a pregnant woman, reported at a former meeting of the Society, who had been subjected to the contagion of erysipelas, and said that she had since been confined, and made a good recovery, without any untoward symptoms.

Dr. Cotting also reported the following cases, in which the patients had been the subjects of or subjected to the influence of erysipelas.

April 13th, 1871, a lady was confined; ninth labor. She had been ill most of the time throughout her pregnancy with nausea, &c., and had been confined to her chamber part of the time. Her cook had erysipelas, and was carried away from her house just previous to her confinement.

She entered the patient's chamber frequently just before and also three days after confinement. The puerperal woman did well.

April 18th, 1871, was called to a woman in labor, whose nursery maid was still sick, though convalescent, with erysipelas, and was frequently in the same room with the lying-in patient. There were no unfavorable symptoms.

April 22d, 1871. A lady had phlegmonous erysipelas which commenced in the region of the vulva, passed between the nates to the left buttock, and covered her back as far as to the lower edges of the scapulæ. She was confined during the course of the disease. The labor was normal. There were no abdominal symptoms. A very large abscess on the back was opened by two incisions, eight and ten inches in length, parallel to the spine, from which there was a copious discharge of sloughy pus.

None of these patients were seen by Dr. Cotting until labor occurred, and of course the erysipelas could not have been caused by any contagion conveyed by him.

May 9th, 1871, Dr. Cotting attended another case of labor in the same street as the third case mentioned above; the patient did well.

So far as the evidence derived from these cases went, it was against the theory of contagion.

Effect of rapid removal of Placenta and Coagula.—Dr. Reynolds spoke in regard to the rapid emptying of the uterus of the placenta and coagula in forceps cases. The older writers advised against too rapid removal, but he thought the uterus contracted more promptly when delivery of the placenta was rapidly effected. Dr. R. asked the gentlemen present whether, in their opinion, such rapid removal would have a greater tendency to cause the uterus to fill with blood than when it was allowed to remain longer.

Dr. Minot said he had never seen any trouble from speedy removal.

Dr. Ayer said that he was satisfied that the sooner the placenta was removed the better.

Dr. Sinclair agreed with these gentlemen in the main, but thought there were exceptional cases in which flowing followed the removal of the placenta.

Dr. Read said that the first case of midwifery he attended—a primipara—he waited long and patiently, according to instructions, for the placenta to come away, but finally he had to remove it; since then he had removed it as soon as possible; he had never had a case of post-partum hæmorrhage. He thought the uterus contracted without any manifestation of pain in most cases.

Dr. Abbot said he removed the placenta immediately after attending to the child.

Dr. Reynolds said he referred, in his question, to non-contractile uterus, with large clots; in such cases he employed external pressure.

Dr. Cotting said he removed the contents of the uterus as soon as convenient.

Dr. Read said he thought we are often unnecessarily anxious about a relaxed uterus; the uterus could often be felt small and hard, and shortly would be found dilated with clots, which would subsequently come away without further trouble of any kind.

Dr. Buckingham said that this condition —mentioned by Dr. Read—need give no alarm unless the pulse exceeds 80 and pain in the back is complained of; when these symptoms are present clots will probably be found in the vagina.

Dr. Read asked if in such cases pressure and manipulation would cause the uterus to contract.

Dr. Buckingham said he thought not. He was in the habit of passing his hand into the uterus and scooping out the contents; he thought this a better procedure than trying to press them out. He thought, also, that irritation of the neck from clots in the vagina might produce irregular contractions.

Dr. Reynolds remarked that it had been said that in intra-vaginal hæmorrhage the clot causes violent expulsive contractions of the uterus.

Dr. Buckingham said that although the hæmorrhage might not be very copious, the uterus is forced upwards and finally expands.

Hæmatemesis of the Child after Delivery by Forceps.—Dr. Minot asked if any gentleman had ever seen vomiting of blood in the child after delivery with forceps; he had seen one such case, and Dr. West mentioned the symptom. He had seen no explanation of it.

CHLORAL IN COD-LIVER OIL is said to render it much less nauseous, and prevents the night-sweats of the phthisical patient, induces sleep, and creates appetite. The pure chloral-hydrate crystals may be added to cod-liver oil in the proportion of 10 grains of the former to 190 of the latter.

Selected Papers.

ON THE FORMATION OF SO-CALLED VITREOUS BODIES (COLLOID) OF THE HUMAN CHOROID AND THE CAUSE OF THE HYALINE DEGENERATION OF THE VESSELS.

By Dr. ALEXANDER RUDNEW, Docent in Ophthalmology at the University at Warschau. Virchow's Archiv, Vol. 53, 1871.
Translated for the Journal by B. JOY JEFFRIES, A.M., M.D., Boston.

OPHTHALMOLOGISTS are familiar with the vitreous bodies frequently seen on the inner surface of the human choroid. They are readily recognized on examining different choroids under the microscope. Donders and H. Müller have carefully studied and accurately described them. Donders in Graefe's Archiv, 1855, under the title "Die Metamorphose der Pigmentschicht der Choroidea." Müller's article is in the same Archiv, 1856, under the title "Untersuchungen über die Glashäute des Auges insbesondere die Glaslamelle der Choroidea und ihre senilen Veränderungen." In Wedl's Handbook, and also in his Histological Atlas, these bodies are described and figured. Since Donders and H. Müller's special studies, cases have been reported in ophthalmic literature by Heymann, Donders, H. Müller, Junge, Schweigger, Pagenstecher, Schiess-Gemaseus and Rudnew. (The translator would refer to the original for references).

Donders and H. Müller attributed to these bodies at least a mechanical action on the retina, and an interference with the latter's physiological function. I therefore determined to ascertain in every eye that came into my hands the presence or not of these bodies on the choroid. By the examination of a large number of eyes, I became acquainted with all Donder's and Müller's described processes. The more I examined, under the microscope, the choroids containing these bodies, the oftener I met with such appearances as did not tally with the former views as to the cause of this morbid process, and I was induced to explain their development in quite a different way. I pursued, therefore, a special study of these vitreous bodies, and the following is the result of my examination, which I submit for general judgment. (The method of preparing the specimens is omitted by the translator.)

Examining now a portion of the choroid where the vitreous bodies are of some size, under the microscope with × 300, and we shall have the following picture (figured in the original). The whole surface turned towards us is an unbroken net of capillary vessels, generally more or less filled with white and red blood-corpuscles. The blood injection of the vessels varies greatly in some cases. When the injection is excessive, it may be attributed to the choroidal hyperæmia present during life, as was remarked by H. Müller among others. The varicose distension of the capillaries is often very visible. This capillary injection renders the subdivision of the vessels quite distinct. The vessel's walls are generally seen when there is no injection. Beneath the capillary net is seen a greater or less amount of the stroma of the choroid, with stellate pigmented cells and vessels, which do not correspond to the veins or the arteries, nor in size to the capillary net. They are rather vessels passing from the capillaries to the veins. The elastic membrane lying in the preparation under the capillaries will be scarcely noticed, since it is perfectly transparent and extremely thin. Hence we can see through this elastic membrane the vitreous bodies. Examining these in different directions, we may be convinced that they project above the capillary layer, and have in general a globular shape. Their free upper surface is perfectly smooth and glistening, their edges are often sharply defined from their surroundings. The substance of these bodies is perfectly homogeneous, yellowish but transparent, allowing the vessels lying beneath them to be seen shining through. Occasionally, from irregular pressure of the covering glass, depressions are seen on their surface. At last they yield to strong pressure, the depressions become cracks, and the whole body breaks up into separate pieces. Chemically, these bodies show great durability. Water maceration does not alter them perceptibly. Weak acids and weak solutions of alkalies do not act upon them. Strong acids and alkaline solutions render them somewhat paler and duller. In caustic alkalies with high temperature they readily swell up. Strong sulphuric acid renders them browner, and finally destroys them. Iodine colors them yellowish, and sulphuric acid added produces no further change. Alcohol and ether do not dissolve these glassy masses. Their chemical properties are thus so indefinite that Donders used the term *colloid* for them. H. Müller compared them with the substance of the vitreous membranes. Their substance must, of course, be regarded as an organic product, the result of some unknown change of the albuminous material. Chemical examination tells us so little of their nature that we omit this part of the question, and pass to that which we more especially undertook, namely, their histology.

As to the mutual relations of these vitreous bodies and their distribution on the surface mentioned, it is to be noticed that they are found separate, with intervening space, or in groups, the individual bodies sometimes joining into a common mass. We saw now and then two joined in biscuit shape, as though formed by the fusion of two equal globes, and sometimes on the edges of a body thus shaped were smaller attached globules.

After this general view of the larger bodies, we must turn to the smaller ones. These are marked by their shape, broader than thick, flattened. In profile we see that they project above the plane of the subjacent part. The outline of these masses is often quite indefinite, so that they appear like glistening spots, inducing H. Müller to call such formations "washed spots." Within these flat bodies are often seen roundish spaces of various sizes, probably filled with a peculiar material, reacting to light very differently from the rest of the mass. These spaces within the vitreous bodies often have the form of cell nuclei, and then the whole vitreous body would represent a cell. H. Müller remarked this, but did not explain it.

As to the position of these young vitreous bodies described, it is to be noticed that their point of attachment generally corresponds to the intervascular substance. But if their size exceeds the space of the intervascular substance, then a part laps over the adjacent vessel. As to other peculiarities, it is difficult to make out any differences between the larger and smaller vitreous bodies, and hence we must regard the latter as of the same vitreous formation only in an earlier period of development. We finally succeeded in finding in the vitreous bodies the accompanying substances described by Donders and H. Müller, in the shape of small round masses. They resembled fat globules, but chemically they acted as mineral deposits. They are generally within the vitreous body, in the younger ones grouped at the point of the above-mentioned nucleus formation. In respect to the distribution of the vitreous bodies, it should be added that in the cases we saw they were scattered throughout the whole choroid from optic nerve to ora serrata. In general more thickly strewn at the equator of the eye.

As to the development of this process at different ages, Donders's and H. Müller's views are already known. According to them, they occur more frequently in the eyes of very old people. Müller reported those changes described almost entirely in subjects from 60 to 70 years of age. I can add but little new on this point to Donders's and Müller's observations, yet I must say that I found these bodies quite developed in people of middle age, and, on the other hand, much less so in those of 70 years. I found the vitreous bodies, with the mineral salts deposited in them, in the eyes of extremely aged subjects.

In deciding the development of these vitreous bodies, their relation to the surrounding tissues must be taken into consideration. The pigmented epithelium of the choroid cannot be excluded from taking part in their formation, but its alterations are passive, and only visible at the points where the colloid is extensive. I have figured a single body on whose summit no trace of pigmented cells was visible ; there remained only a few pigmented nuclei of the broken-down cell. On the smaller vitreous bodies well-preserved cells are distinguishable. Hence we may conclude that these cells are destroyed simply by the pressure which the vitreous bodies exert on them, and that Donders's idea of the formation of these bodies from the nucleus of the pigmented cell is incorrect, so that their development has no connection with epithelial cells. On the other hand, let us examine these colloid bodies in reference to their connection with the tissue of the vascular layer of the choroid, and we may readily convince ourselves from transverse and flat sections that the connection of these bodies with this tissue is a very intimate one.

Whilst we can readily wipe away with a brush the epithelial cells from the upper surface of the colloid bodies, we cannot wipe off these latter from the tissue of the vascular layer. Whence this firm connection between colloid bodies and vascular layer? Müller would thus explain it. The colloid masses are products of the pigmented cells of the vascular layer and extrude from these cells into the free surface of the elastic membrane. Were this so then the younger ones would be easily wiped off, which is not the case. My examinations have, on the contrary, convinced me that the colloid bodies are never on the free surface of the elastic membrane, but, on the other hand, *under it.* Whence now and from what elements of the vascular layer do the colloid bodies come? Since the younger ones still retain the cell character, we must assume that they come from a regressive degeneration of some morphological element found in the vascular layer.

It is now known that in the vascular layer—in the normal condition in less numbers, in the inflammatory condition in groups—are found small round cells having all the characteristics of white blood-corpuscles. Since the recent discovery of the migration of white blood-corpuscles, no one will doubt but that we here have such an emigration, and that the colloid bodies of the choroid are just these emigrated white blood-corpuscles. The proof is, that in my preparations may be followed all the transition forms of the white corpuscles into colloid or vitreous bodies. In one I have figured, we see the newly emigrated, still unaltered white blood-corpuscle; another, larger, losing its cell character, becomes more compact, glistening and more indifferent to the action of reagents. Later, the nucleus disappears, and then the cell character is lost; in a word, the blood-corpuscle becomes a colloid body. When, during this process, several blood-corpuscles run together, we have those extended masses of colloid mentioned above. Often during this change a deposit of mineral salt occurs. Here and there the largest colloid masses push up the elastic membrane towards the centre of the globe, finally break through it and become free. We would once more recapitulate. 1st, that colloid bodies are emigrated white blood-corpuscles; 2d, that they are formed by regressive metamorphosis of these latter; 3d, that they may occur at any age, since the conditions for this emigration occur at every age; 4th, that the more frequent appearance of colloid in old people is readily explainable by the fact that the stases in the vessels are much more common in them than in younger persons.

Let us pass now to the hyaline degeneration of the vessels. I saw this degeneration very marked in one case where there was purulent inflammation of the pia mater of the brain. This purulent process was also strongly developed in the choroid of the eye. In microscopic preparations I saw very extended vitrification of the walls of the vessels of the choroid. Some vessels were quite plugged by the glassy masses. This process has long been recognized. Junge and Pagenstecher found it in *retinitis pigmentosa*. Müller and Schweigger described the same with Bright's disease of the kidney. I have frequently seen this degeneration in cases where I found purulent inflammation of the choroid. Hyaline degeneration of the vessels was, as a rule, associated with greater development of colloid. The vitreous masses thickening the walls of the vessels, and even completely plugging their calibre, had the following peculiarities:—they were homogeneous, pretty transparent, strongly refractive and withstood the action of several reagents, as acids and caustic alkalies. They did not, however, exhibit the character of an amyloid, a fat corpuscle, or a mineral concrement. By more careful examination, we saw that the mass was not always wholly homogeneous, but here and there seemingly composed of separate bodies welded together, the points of union being designated to the eye by faint lines. Besides these glassy masses completely filling the lumen of the vessel, I noticed in several, completely isolated colloid bodies, by whose junction and aggregation these compact glassy masses were formed. From all this, I feel authorized in concluding that the alteration of the choroidal vessels is due to the same process as I have attributed the existence of the colloid bodies. That the vitreous masses we have described are not due to common thrombus or to embolus is proved by the fact that they possess none of the characteristics of the fibrinous plugs.

From all these examinations may then be deduced, that the white blood-corpuscles are not only the source of organized new formations, as pus or granular tissue, but serve also for the development of such pathological products as are placed by their cause in the category of regressive products.

ON THE THERAPEUTIC VALUE OF THE HYPODERMIC INJECTION OF ERGOTIN IN HÆMOPTYSIS.

By C. Currie Ritchie, M.D., Physician to the Hulme Dispensary, Manchester.

The use of ergot of rye in its aplication to the practice of medicine appears to be almost entirely limited by the great body of the profession to obstetric practice. In a suggestive paper published in the *Practitioner* for September 1868, Dr. Alfred Meadows advocates the extended use of this drug, which he had found extremely useful in various uterine and vesical affections; and in the same spirit I venture to submit the following observations on a therapeutical aplication of ergot, hitherto but little known, with the hope that the experience of others may be elicited, and so an accurate knowledge of its real value be arrived at.

It seems to me that the restricted use of ergot is the direct result of the want of a full appreciation of its great physiological action; that is, of the power which it possesses of inducing contraction in muscular fibre of the involuntary or non-striped variety generally, and not merely in that of the uterus. Although having an important bearing on the general action of ergot, the following remarks apply especially to its action on the bloodvessels, of which unstriped muscular fibre is so important a histological element.

Experimental research has conclusively shown that ergot contracts the minute arteries, and by so doing increases the blood-pressure. A simple experiment will, as Dr. Meadows has shown, be sufficient to establish the former of these propositions: thus if a single grain of ergotin in solution be injected subcutaneously into the web of a frog's foot previously extended under a microscope, in a few minutes the circulation will be seen to become much quicker, then it will stop for a few seconds and oscillate in a spasmodic, jerking manner; after about half an hour, the blood-current will gradually return to its normal even, steady flow. The well-known experiments of Brown-Séquard afford additional evidence on this point. He found that in the dog the vessels of the pia mater contracted during its administration, just as with belladonna, but that ergot acted more powerfully on the cord than belladonna; both of these agents diminish the reflex power of the cord. The second proposition, that the blood-pressure is increased, receives interesting corroboration from the recent researches, chiefly with the hæmadynamometer, of Dr. Ch. L. Holmes, published in the *Archives de Physiologie*, No. 3 for 1870. He finds that "ergot contracts the minute vessels by an action on their muscular walls," and "that this contraction augments the blood-pressure in the large vessels;" it is, moreover, found that previous division of the vaso-motor nerves does not prevent the narrowing of the minute vessels, and that this diminution of calibre is also produced in the minute vessels of the lungs, causing a temporary diminution in the pressure of the systemic arteries. This last result has a direct bearing on the whole subject of pulmonary hæmorrhages; and as it seemed to Dr. Holmes to be incapable of a scientific explanation, he performed numerous experiments in order to test its accuracy. Thus, he surmised that the effect might be due simply to the sudden introduction into the interior of the heart of a foreign body, and accordingly he substituted other substances for the ergot which he had injected into the jugular vein of a dog; but whereas the injection of ergot was with great rapidity followed by sudden diminution of the blood-pressure, which remained depressed for several seconds and then reached a higher level than before the injection, no such results followed the injection of the other substances. This sudden primary descent of the pressure-curve occurred after ergot-injection, even when it was introduced at a distance from the heart, and when the cardiac nerves had been divided previous to the injection; so that Dr. Holmes is led to the conclusion that the occurrence is due to contraction of the pulmonary vessels, "impeding or even preventing the passage of blood into the left heart, and so diminishing the flow into the arteries and lowering their tension."

Such considerations as these lead us to hope that renewed and extended investigation by those who have the opportunity of inquiring into the therapeutical actions of the ergot of rye may assign this powerful agent its true place in our Materia Medica.

Ergot has long had the reputation of being a styptic; and as such has, in common with a multitude of others, been recommended in the treatment of hæmoptysis. Dr. Dobell (*British Medical Journal*, 1868, i. p. 630) quotes a case in Guy's Hospital under the care of the late Dr. Addison, which proved very intractable until ergot was administered. Dr. Dobell himself recommends it, but administers at the same time ergot, digitalis, gallic acid, and other preparations, which leaves us in doubt as to which of the drugs was the means of arresting the hæmorrhage. In a paper by Dr. Herman Weber (Clin. Soc. Trans. ii. 155), he remarks, "Another substance from which I have seen good effect in arresting severe hæmoptysis is ergot of rye in large doses, viz., from three to six drachms of the watery extract of our Pharmacopœia in twenty-four hours." I have not found the internal administration of ergot followed by the satisfactory results so frequently obtained from the use of gallic or sulphuric acids, acetate of lead, or sedatives; and in several cases it has produced such a disagreeable sensation of nausea that its use has had to be abandoned. In one case there was præcordial pain for half an hour after each dose.

An interesting paper published by Von Langenbeck in the *Berliner klinisch. Woch-*

enschrift, No. 12, 1869, p. 117, "On the Hypodermic Injection of Ergot in Aneurism," contains the first account I can find of its administration by this method. He argued that, as ergot induced contraction of the smooth muscular fibres, it would be a powerful agent in producing hæmostasis. Two cases of aneurism, one in the right supraclavicular fossa and the other of the right radial artery, were successfully treated by this means. Dr. Dutoit of Bern (Langenbeck's *Arch.* Bd. xii. No. 3) and others have successfully repeated this method of dealing with aneurisms. In some editorial remarks appended to the medical periscope of the *Edinburgh Medical Journal* for July, 1870, a case is quoted where a patient who had bled to thirty-six ounces from the lungs, within a few minutes, had his hæmorrhage completely checked in three minutes by the subcutaneous injection of five grains of ergotin; and Dr. Allan Jamieson records a case in the *British Medical Journal* for June 3, 1871, in which the same treatment was successfully adopted in a slighter case. The last case attracted my attention to this mode of treatment, and I have since adopted it in eight cases, with success; a solution of five grains of ergotin in ten minims of distilled water was employed, except in one case, in which unusual irritation was produced by it; I therefore substituted a solution (prepared according to Langenbeck's formula) of three grains of ergotin, in equal parts of glycerine and rectified spirit, which produced very little irritation.—*London Practitioner.*

Medical and Surgical Journal.

Boston: Thursday, February 15, 1872.

VACCINATION AND RE-VACCINATION.

As the subject of smallpox is attracting the attention of the public to a considerable extent, the prevention and treatment of the disease become proportionally of interest to the medical profession. We have already spoken of the subject at various times in the columns of the Journal; but in order to answer certain points which have recently been brought up and on which some medical men seem undecided, we have been asked to republish portions of the report made by Dr. J. C. White to the Boston Sanitary Association in 1861, and published by the Legislature in connection with papers by Drs. John and Robert Ware and D. W. Cheever. We regret that we cannot present these truly valuable papers anew to the profession; our want of space, however, forbids our giving more than brief extracts.

"*Inquiry into the necessity and efficacy of Re-vaccination, and as to when and how often it is necessary.*"—We approach this division of our subject with an extreme degree of hesitation, for on no other question of medicine has a greater diversity of opinion prevailed. Some maintain that the prophylactic power of vaccination is only temporary, gradually becoming feeble as the individual grows older, while others believe that its preservative virtue is unlimited in its nature, and absolute for the great majority of mankind. This latter class attributes the occurrence of variolous diseases after vaccination, to its improper performance. That such cases are of frequent occurrence, especially in epidemics, is admitted by all. Dr. Jenner lived to see them in persons he had vaccinated himself. * * *

It may be asked what is the criterion for a perfect re-vaccination; how do we know that the system has shown itself susceptible to the influence of smallpox? What do we mean by the operation being successful, imperfect or a failure? These questions may be best answered by quoting Dr. Gregory, who has determined the following laws from large experience in re-vaccination. He says: "1st. In many cases, especially if the interval from the primary to the secondary vaccination has not exceeded five years, the skin appears completely insensible to the vaccine matter. 2d. At intervals exceeding ten years the virus irritates locally. In three, or at farthest, four days from the insertion, an areola of irregular shape appears around a minute, itching, acuminated, and angry vesicle. A scab forms on the eighth day, which soon falls off, leaving no permanent cicatrix. 3d. In other cases a vesicle forms more gradually, without either local or constitutional irritation; a slight areola succeeds, and the vesicle yields on the seventh day a considerable quantity of thin lymph; but this lymph is incapable of propagating the disease. 4th. In this set of cases, the second vaccination runs a perfectly regular course. A circular areola forms on the eighth day, and the lymph propagates a genuine cowpox." Successful cases, then, are those capable of standing the test of the fourth class, that is, those capable of propagating themselves. Of course, we find every shade of difference in individual cases, from the slight redness, showing that the system has felt the influence of the virus, and without which the experiment counts as nothing, up to the well-marked phenomena such as we witness upon an infant. This is the test used in the Prussian army, for there they always use lymph derived from vesicles of re-vaccination, instead of resorting to that taken from children or primary vesicles, as is the custom among us. Dr. Lohmeyer, in giving the results of re-vaccination in the Prussian army for 1840, says: "In the past year more frequently than in any other, the vaccination was performed by lymph taken from the genuine and regular vaccine pustules on adult persons; for past experience has consequently led military practitioners to be more strongly convinced that for the vaccination of adults, lymph taken from adults is to be preferred to that taken from children, and that it produces a more powerful reaction and more strongly developed pustules. And that the pustules thus produced do actually protect from the contagion of smallpox is proved by this, that in the fourth corps, in which the plan has been long followed, of vaccinating adults with lymph taked from good pustules in other adults, there has not occurred during three years a single variety of smallpox among those in whom the vaccine pustule ran its ordinary course, nor more than one case among those who were unsuccesfully re-vaccinated, although smallpox was constantly more or less rife in the neighborhood in which the corps were quartered." No bad results, moreover, have been seen to follow its use.

Still another question arises. How often, or at what age, shall re-vaccination be performed? The earlier in life we vaccinate for the first time the better; that it cannot be too early is proved by the fact that children are born into the world covered with the eruption of smallpox, and we have already shown how great a proportion of deaths from the disease occurs in infants. We have seen, too, that the body being once fully protected in childhood enjoys, in the majority of cases, immunity up to the age of 10 or 12. It would be advisable to repeat the operation before or by the 14th or 15th year, and again at the age of 25. After this, man seems to acquire more and more immunity by some natural process as he grows older, so that the operation need not be again repeated, except when the person is exposed in some extraordinary degree. Our object is, of course, to obtain, at every period of life, all the security which vaccination will afford. The opinions of hosts of authorities might be quoted in support of these views; but it is hoped enough facts have been adduced already to convince every one of their importance and truth. The following directions of Rösch, seem so very well put, and comprehend so completely the opinions of others, that we cannot forbear repeating them here.

1. To submit to vaccination all individuals who have not been vaccinated, even when they have had variola.

2. To repeat the vaccination ten or twelve years after the first vaccination.

3. If this re-vaccination does not prove successful, it will be necessary to repeat it from year to year, until complete success shall follow.

4. Should the re-vaccination prove entirely successful, the disposition to contract smallpox ought to be, for many years subsequently, excessively feeble; but notwithstanding this condition of the system, that is, an individual successfully re-vaccinated, a proper exercise of prudence would require after ten or twelve years a second re-vaccination.

We have thus endeavored to account for the occurrence of smallpox after vaccination, on the ground that its protective power is, to a certain extent, temporary, and have pointed out a remedy sufficient to secure every individual through life, viz.: re-vaccination.

* * * * *

We feel justified in offering the following conclusions as the results of our investigations:—

1. That the introduction of vaccination acted as an immediate check to the frightful ravages of smallpox in all parts of the world. That it destroyed the susceptibility to the disease in the individual as completely as inoculation or a previous attack of smallpox, without the danger or inconvenience which accompany the latter. That through its action epidemics of smallpox have become far less frequent than formerly, and their mortality has been reduced to a great extent. That its success has been greatest in those countries, where its universal employment has been made compulsory.

2. That the protective power of vaccination is absolutely the same to-day as it was in the time of Jenner.

3. That the immunity conferred by vaccination is not alike either in amount or duration in all persons. That the history of epidemics teaches that smallpox will attack

a definite proportion of the vaccinated, if exposed to its influence. That post-vaccine smallpox is very rare before the 10th year in children, and that it increases in frequency from the age of 12 to that of 25. That after the age of 35 the inherent predisposition to take smallpox seems to die out to a great extent both in the protected and unprotected.

4. That we possess in re-vaccination our only means of ascertaining the condition of individual security at any time, and of affording it when found wanting. That the large proportion of cases in which re-vaccination is found to be successful, its influence in preventing the rise and spread of epidemic smallpox, the renewed safety it affords persons of all ages, and the unanimity of European governments in making its performance compulsory so far as possible, are sufficient grounds for any action the association may deem proper to take to render its employment among us more general.

5. That there is no sufficient evidence to show that the vaccine virus now in use has degenerated in any way since the days of Jenner, or that there is any necessity to resort to the cow for a fresh supply.

6. That the operation of vaccination and re-vaccination is perfectly safe in itself, and the popular opinion, that diseases may be introduced into the system by vaccination, when properly performed, is entirely erroneous, and should be eradicated from the public mind.

7. That the recent epidemic conclusively shows, that a great neglect of the proper precautionary and preservative measures prevails in the community, and that some more effective means, than those now employed, should be adopted to prevent its recurrence in the future.

IMPORTANT CASE UNDER THE ENGLISH MEDICAL ACT.—We have received from a correspondent copies of papers from Shrewsbury (England), containing the details of a case at the Borough Police Court, in which a person named Andrews is charged with having unlawfully, and wilfully, and falsely taken and used a name, title, addition, and description, to wit, M.D., meaning thereby Doctor of Medicine, and thereby implying that he, the said Thomas Andrews, was then registered under the Medical Act, whereas he was not so registered, he not being a person who was actually practising medicine, in England, before the 1st of August, 1815, contrary to the statute.

The case was heard before a bench composed of magistrates. The charge was brought by the Shropshire Ethical Branch of the British Medical Association as being a violation of the 40th section of the Medical Act, which provides that any person who should wilfully and falsely take and use any title or description under the Act was liable to a penalty not exceeding £20.

The defendant had for some time conducted the business of a druggist. After a certain period it became evident that something more than the dispensing of drugs was carried on; but the profession were unwilling to take action until something came before them which rendered it incumbent on them to do so. The medical gentlemen who had brought the charge had no object to serve in the steps they had taken save the honor of the profession to which they belonged, and the protection of the public from being victimized by persons not duly qualified to practise as medical men. Some two years ago they saw in a public print that Mr. Andrews had received the diploma of M.D. from his college, together with a gold medal. The next thing they had to note was a suit in the County Count, entered by Thomas Andrews, M.D., plaintiff; and the last scene of all was a lamp in front of his shop door, on which the letters "M.D." were painted. All those facts tended to show that the defendant was not laboring under any mistake. They were the unmistakable acts of a man who was practising as a physician. Some time in this year, a respectable woman who was ill visited the defendant at Shrewsbury. She had previously been attended by a medical gentleman of great ability living in her own neighborhood. The defendant attended her regularly at her own house. The climax came, and the poor woman died. The defendant then sent to deceased's brother a bill for £17 18s. 0d. This amount was paid by the brother in instalments, and he had received a receipt to that effect. The question therefore arose in the medical profession whether or no the defendant had not falsely and wilfully represented himself as a physician, whether, in fact, he were duly registered to practise by the laws of England, or whether he were possessed in any way of an honest diploma.

The counsel for the defence in his reply made use of the hackneyed complaint of exclusiveness and oppression on the part of the plaintiffs. He was willing to admit the technical guilt of his client, but he questioned the wisdom or justice which would exclude men, having foreign diplomas only, from sharing the advantages of the British Medical Association. It was quite true that the Medical Act prohibited unregistered men from receiving fees; but surely they might be allowed to practise. The entire argument of the counsel constituted a tacit admission of his client's irregularity.

The action of the gentlemen of the British Medical Association may perhaps be better understood by reference to the numbers of this JOURNAL for April 20 and May 18, 1871; the degree exhibited in court as the basis of the defendant's title was found to emanate from the institution formerly known under various *aliases*, but generally as the American University of Philadelphia. The action taken by the University of Pennsylvania and the respectable medical men of Philadelphia, and the recall of the charter of this bogus institution by the legislature of Pennsylvania, are fresh in the memory of our readers. It was therefore with a view of protecting themselves against the pretensions of persons bearing illicit diplomas that the English medical men brought the charge, and we congratulate them that the court sustained them therein by ordering a fine of £20, or, in default, an imprisonment of two months.

We learn by late advices from London that the defendant in this case appealed from the decision of the court, whereupon the Council of the Association passed the following resolutions, unanimously:—

"1. That, in the opinion of the Council, it is highly desirable in the interest of the profession here at large, that the legality of the conviction should be tested in the Exchequer of Pleas; in order that, if void in law, the General Medical Council may be in a position to urge upon the Government the pressing necessity of inserting in the proposed Amended Medical Bill an effective penal clause to protect the public against illegal practitioners and unqualified pretenders.

"2. That, deeply affecting as the case does the honor and interests of the profession generally, Mr. Chandler be authorized to instruct counsel to appear before the court in support of the conviction.

"3. That, with the view of indemnifying Dr. Styrap—who has kindly undertaken in their behalf the invidious duty of prosecutor and respondent in the case—the Council appeal with confidence to the profession for support."

VIRUS FROM THE HEIFER.—A friend desires us to ask the experience of members of the profession in reference to the use of vaccine virus from the heifer, as compared with that obtained by human transmission. In his practice, both in primary and in re-vaccinations, the animal virus has proved unexceptionally inert. This result is confirmed by testimony which he has received from several medical friends. In replies to this interrogatory a distinction should be made between the true vaccine vesicle and the popular criterion of successful vaccination, "a very sore arm."

PROF. TERRY.—The following resolutions were passed at a meeting of students attending the Cleveland Medical School, as a token of respect for the late Professor Terry:—

Whereas, God in his allwise providence has removed, after a lingering illness, our late Prof. Terry, M.D., who died on the 5th inst., after a long life of professional usefulness in this city.

Resolved, That although we bow humbly to the will of Divine Providence, we have received the intelligence of the death of Prof. Terry with the deepest sorrow.

Resolved, That we deplore the loss which the profession has met with through his decease. That the connection of Prof. Terry with this college has been such as to secure the esteem and regard of all connected with it. His loss will be especially felt by the numerous graduates and students of this school, who, while profiting by his instructions, have learned to respect and esteem him.

Resolved, That to the daughter of the deceased and his many personal friends we tender our sincere regards and heartfelt sympathy in this the hour of their great bereavement

Resolved, That the members of this class attend the funeral at the time and place appointed.

Resolved, That these proceedings be published in the city papers, the Boston Medical and Surgical Journal, and that a copy be sent to the family of the deceased.

Geo. W. Dille,
Jas. F. Wilson,
T. A. Montgomery, } *Committee.*

Cleveland, O., Feb. 7, 1872.

Reproduction of the Crystalline Lens.—M. Milliot communicated to the Biological Society of Paris, Oct. 14, 1871, the results of some experiments on this subject, which he has been for some time engaged upon. After referring to the previous investigations, particularly those of Gruby, Textor, Valentin, and the conclusive experiments of Philippeaux, M. M. gave the particulars of his own, and presented the following conclusions deduced from them:—

1. The reproduction of the crystalline lens in some of the mammiferæ is incontestable. The tubes of the reproduced crystalline undergo, in their reappearance, the same phases that they do during their generation and embryonic evolution.
2. This reproduction only occurs within the capsule of the crystalline. It is in direct relation to the thickness of the cortical layers of the crystalline left after extraction, especially in the equatorial region, and in inverse relation to the age of the animals, and to the lesions of the crystalline capsule.
3. The posterior crystalline capsule seems to take no part in the reproduction of the crystalline, except perhaps in its equatorial portion.
4. This reproduction takes place even when the whole of the crystalline lens has been extracted. It commences generally towards the end of the second week after the operation, and is completed only between the fifth and twelfth months.
5. The reproduction of the crystalline may be repeated, that is to say, it occurs after the extraction of a crystalline previously reproduced, but it is then limited.

These results are derived from more than forty experiments.—*Revue de Cours Scientifique*, Oct. 28, 1871.

Prof. Billroth on Ovariotomy.—In his "Surgical Reminiscences," now publishing in the *Wiener Med. Wochenschrift*, Prof. Billroth thus speaks of ovariotomy:—

"First of all, surgeons must dismiss from their minds that ovariotomy is a dangerous operation; and, through the medium of well-informed practitioners, this conviction must make its way with the public. After ovariotomy skilfully performed according to the rules of art, recovery is the general rule, and a fatal issue the constantly diminishing exception. Comparing it with some other operations, ovariotomy, taking the mass of cases, is shown by statistics to be less dangerous than amputation of the thigh, disarticulation of the shoulder and hip-joints, or excision of the hip or knee. Its danger is about the same as that of amputation of the arm, excision of the shoulder, partial excision of the jaw, lithotomy in the young, and similar operations. We must, however, perform ovariotomy strictly according to the rules laid down by the English operators in their classical works; and only after having attained the same results should we venture to practically put into force our own ideas, in order to improve upon these. I had the good fortune to see Spencer Wells operate upon two complicated cases, and from them, as well as from oral communication with this remarkable man, I learned much. I constantly follow his precepts, knowing that he has long since thoroughly thought out and tested all that can happen to myself. I shall willingly regard myself during my lifetime as his scholar; and contented shall I be if it falls to my lot, by means of this operation, to snatch from certain death one-half the number of lives he has been enabled to save."—*London Med. Times and Gazette.*

Photographed Nerve-sections.—Dr. Duchenne, of Boulogne, has presented to the French Academy of Medicine an album containing copies of photographs of the appearances presented by sections of the great sympathetic nerve, the spinal ganglia, the spinal cord, and the medulla oblongata greatly magnified. He fixed the photographs on stone by a process he terms photo-autography, the details of which, however, he does not communicate. It is satisfactory to find him stating that the results confirm the substantial accuracy of the beautiful drawings by Dr. Lockhart Clarke on the central part of the nervous system, and especially upon the medulla oblongata. In his later experiments, Dr. Duchenne has adopted Dr. Clarke's method of preparation with chromic acid and carmine. He states that certain micrographic details come out with wonderful clearness in the photographs, and that by this means some important additions may be made to our knowledge. He has ascertained that in the white substance of the medulla oblongata there are nerve tubules from thirty-three ten thousandths of a millimetre to three-hundredths of a millimetre in diameter.—*Nature.*

A CENTENARIAN PHYSICIAN.—Dr. Francis Hay, of Columbus, Ohio, recently celebrated his one hundredth birthday. The doctor is a native of Bavaria, having been born in Wurzburg, December 8, 1771. He was a student at that place and there acquired his profession. In 1834 he came to America and practised his profession successfully in various parts of this country, and in 1861 went to Columbus, where he has resided ever since. His wife, to whom he was married in 1802, is now in her ninety-fifth year, is quite nimble and healthy, and bids fair yet to survive a number of years. The doctor himself is wonderfully lithe and strong, for one so old. He is frequently seen upon the streets walking with a firm and steady step, and as upright in his carriage as a man in the prime of life. He is perfectly able to help himself, and in the care of his person asks for no assistance from any one.—*Philadelphia Med. and Surg. Reporter.*

THE COMMENCEMENT EXERCISES OF THE DENTAL DEPARTMENT OF HARVARD UNIVERSITY were held at the Medical College yesterday, at 11 o'clock. The President and Faculty, with members of the corporation and overseers and invited guests, met, as usual, in the Museum, and proceeded to the lecture room, where prayer was offered by the Chaplain of the University, Rev. Dr. Peabody. *Four* gentlemen of the graduating class then read portions of their theses, after which the degree of Doctor in Dental Medicine was conferred on the following persons: the titles of the theses presented by them are also given.

Ames, George Henrey, *Providence, R. I.* The effect on the general system of diseases of the teeth and parts connected with them.
Bancroft, Sidney Chapin, *Lawrence.* Object of Artificial Dentures.
Bartlett, Charles Samuel, *Boston.* Petroleum Naphtha as an Anæsthetic.
Bradbury, Edwin Perley, *Boston.* Dental Caries.
Bell, James Dias, *Stuttgard, Germany.* Dental Hygiene.
Clark, James Adkins, *West Brattleboro', Vt.* Physiology and Pathology of Dentition.
Curtis, James William, *Brunswick, Me.* Dental Pathology.
Geist, George William, *Frankfort, Germany.* Salivary Calculus.
Noyes, George Edward Langdon, *Newburyport.* The Oral Cavity.
Keyes, John Warner, *Boston.* Extraction of Teeth.
Robinson, Frederic Miller, *St. John, N. B.* Digestion.
Silva, Samuel Saiza, *Fayal.* Fractures of the Jaws.
Torrens, Benjamin Henry, *Bangor, Me.* Anæsthesia.
Tucker, Winslow Lewis, *Boston.* Modern Dentistry.
Wilson, Cecil Porter, *Boston.* Dental Caries.

After the degrees had been conferred, the annual address before the graduating class was delivered by Dr. Oliver Wendell Holmes, and was listened to with much satisfaction.

TREATMENT OF WHOOPING COUGH WITH COMPRESSED AIR.—Dr. Freud observes that whooping cough was well described by Willis in 1862, that it is probably contagious, and that the probable carrier of the contagion is the expectorated mucus. Many pathologists admit lesion of the pneumogastric nerve as a cause of the disease, because it has sometimes been found reddened. He considers the division of the stages of the disease into the precursory or catarrhal, the convulsive and the convalescent, to be advantageous. No treatment has hitherto been found materially to shorten the duration of an attack, though belladonna, opium, extract of hemp, hyoscyamus, lactuca, pulsatilla, moschus, castoreum, cochineal, emetics and metallic antispasmodics have been tried; change of air, however, proves of service. Inhalations of the gases in special chambers have been recommended, and were stated to have been very effective, but have now almost become obsolete. More recently chloral hydrate and peroxide of hydrogen have been employed. Now, however, the effects of compressed air are stated by M. Freud to be a valuable method of treatment. It was first recommended by M. Bertin, of Montpelier, and then by Dr. Sandahl, of Stockholm, who reports no less than 102 cases rapidly cured by this means. M. Freud has also tried it and obtained extremely favorable results from its use.—(See Virchow's *Jahresbericht Jahrgang,* 5, Band ii., Heft 1, p. 128.)

ZOÖ-DERMIC GRAFTS.—M. Létrévient, considering the pain and possible accidents incidental to cutting skin-grafts from the human subject, has employed "zoö-dermic" grafts cut from the skin of the belly of a dog in a place unprovided with hair. The grafts have succeeded, and he recommends the process.—*Lyon Médical.*

Medical Miscellany.

Dental School of Harvard University.—Announcement is made that the summer session of this school will commence Feb. 19th inst. An additional course in dental instruction is thus afforded, to continue four months, and to include branches of study and practical exercises supplementary to the regular winter system. Detailed information with regard to the course will be afforded by the Dean of the Faculty, Dr. T. B. Hitchcock.

Boston City Hospital.—The following appointments for the ensuing year have just been made:—

Assistant Surgeons—Frank W. Draper, M.D., N. P. Quint, M.D.

House Officers—Ophthalmic Interne, Francis Atwood. *House Physicians*, J. F. Perry, Jr., William P. Hammond, G. W. Clement. *House Surgeons*, Edward W. Sawyer, M. A. Morris, J. R. Morgan. *Ophthalmic Externe*, John C. Cockburn.

The late Dr. Nathan Johnson.—In the brief notice of this esteemed physician in the Journal of the 25th ult., his residence for the last forty-five years of his life was stated to have been in Leesburg, Ohio. It should have been printed, that, excepting a residence of 18 months in Leesburg, he resided from the age of 10 years up to Feb., 1839, in Belmont County, Ohio, and from that time till his death in Cambridge City, Indiana. Dr. J. was a member of the American Medical Association, was one year President of the Indiana State Medical Society, and was extensively and honorably known in the sections of country where he resided.

Venesection in Pneumonia.—Dr. Simorre, of Contres, ventures (according to *L'Union Médicale*) to transcend the prevailing practice of the period and in the first stage of pneumonia he performs venesection every four hours, day and night, until the disease yields. He believes that the secret of the success which he has obtained lies in the frequent repetition of the operation with short intervals, the disease thus having no chance to take a new departure, but remaining stationary at first, then in a short time succumbing altogether. The opinion is expressed that even shorter intervals may be in some cases desirable.

Lady Students in Moscow.—Ladies are now to be admitted to the lectures on medicine at the University of Moscow, and to graduate, provided they can pass the usual examinations. It has been found impossible, as at first intended, to institute separate lecture and class-rooms, so that both sexes will meet in the general class-rooms. The Council of the University have fully confirmed the action of the School of Medicine in this matter, and the ladies may therefore expect to enjoy their privileges undisturbed by doubts or fears.—*Canada Med. Jour.*

To Correspondents.—Communications accepted:—The Changes in the Medical Department of Harvard University.

Correction.—The prescription of Dr. Hammond—referred to in our issue of Feb. 1, page 71, top of first column—was accidentally omitted. It is as follows:—

R. Strychniæ sulph., gr. i.;
Ferri pyrophos,
Quiniæ sulph., aa dr. i.;
Acid. phos. dil.,
Syrup. zing., aa oz. ij. M.
Teaspoonful three times a day.

Books Received.—Plain Talk about Insanity. Its Causes, Forms, Symptoms, and Treatment of Mental Diseases. With Remarks on Hospitals, Asylums, and the Medico-legal Aspects of Insanity. By T. W. Fisher, M.D., late of the Boston Hospital for the Insane. Boston: A. Moore. 1872. Pp. 97. (From the Publisher.)—Animal and Vegetable Parasites of the Human Skin and Hair. By B. Joy Jeffries, A.M., M.D. Boston: A. Moore. 1872. Pp. 102.—Smallpox. The Predisposing Conditions, and their Prevention. By Carl Both. Boston: A. Moore. 1872. Pp. 50.

Pamphlets Received.—A Plea for Scientific Reform. A Letter to Rev. Theodore L. Cuyler, D.D., on the Attitude of Physicians and Scientists towards the Temperance Cause. By George M. Beard, M.D., New York. Pp. 21.—Electricity in the Treatment of Diseases of the Skin. By George M. Beard, M.D., New York. Pp. 13.

Died,—In this city, 12th inst., Thomas F. Goddard, M.D., aged 27 years.

Deaths in seventeen Cities and Towns of Massachusetts for the week ending Feb. 10, 1872.

Cities and Towns.	*No. of Deaths.*
Boston	126
Charlestown	15
Worcester	25
Lowell	17
Milford	8
Chelsea	4
Cambridge	19
Salem	10
Lawrence	15
Springfield	3
Lynn	12
Fitchburg	5
Taunton	4
Newburyport	6
Somerville	6
Fall River	8
Haverhill	4
	287

Prevalent Diseases.	
Consumption	52
Pneumonia	25
Scarlet fever	14
Croup and Diphtheria	10
Typhoid Fever	8
Erysipelas	6

There were five deaths from smallpox: four in Boston and one in Lynn. Of the deaths from scarlet fever, seven were in Worcester.

George Derby, M.D.,
Secretary of State Board of Health.

Deaths in Boston for the week ending Saturday, Feb. 10th, 126. Males, 68; females, 58. Accident, 2—apoplexy, 4—asthma, 2—bronchitis, 1—congestion of the brain, 1—disease of the brain, 7—cyanosis, 2—cancer, 3—cholera infantum, 2—cholera morbus, 1—consumption, 18—convulsions, 2—croup, 2—debility, 3—diarrhœa, 1—dropsy of the brain, 4—diabetes, 1—diphtheria, 2—erysipelas, 3—remittent fever, 1—scarlet fever, 4—typhoid fever, 2—disease of the heart, 4—intussusception, 1—disease of the kidneys, 4—laryngitis, 1—disease of the liver, 1—congestion of the lungs, 3—inflammation of the lungs, 9—marasmus, 6—measles, 1—cerebro-spinal meningitis, 1—old age, 2—paralysis, 2—premature birth, 5—peritonitis, 2—puerperal disease, 3—suicide, 1—smallpox, 4—scalded, 2—unknown, 6.

Under 5 years of age, 51—between 5 and 20 years, 8—between 20 and 40 years, 32—between 40 and 60 years, 17—above 60 years 18. Born in the United States, 90—Ireland, 26—other places, 10.